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(54) **ANTENNALESS WIRELESS DEVICE CAPABLE OF OPERATION IN MULTIPLE FREQUENCY REGIONS**

(57) A radiation booster (1401, 1405) is presented. The radiation booster (1401, 1405) is configured for forming a radiating structure (1400) for operation in a first frequency region by coupling of electromagnetic energy between a ground plane layer (1402) and a radiofrequency system. The radiation booster (1401, 1405) comprises at least one conductive part, and at least one connection point (1403, 1406) configured for forming an internal port

of the radiating structure (1400) with a connection point (1404, 1407) of the ground plane layer (1402). The radiation booster (1401, 1405) has a maximum size of 1/30 times a free-space wavelength corresponding to a lowest frequency of the first frequency region, and a major portion of a surface of the radiation booster (1401, 1405) is configured to be placed on one or more planes substantially parallel to the ground plane layer (1402).

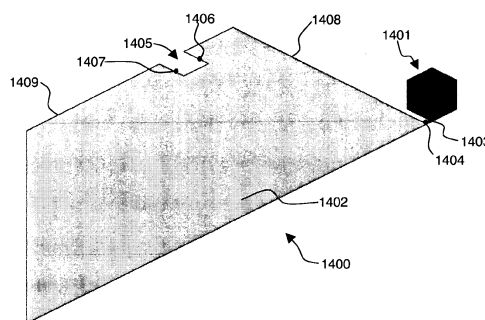


Fig. 14a



EUROPEAN SEARCH REPORT

Application Number

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The present search report has been drawn up for all claims			

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Place of search

Munich

Date of completion of the search

26 July 2023

Examiner

Marot-Lassauzaie, J

CATEGORY OF CITED DOCUMENTS

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Application Number

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 26 July 2023	Examiner Marot-Lassauzaie, J
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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